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PSYCHOLOGICAL INTERVENTION WITH WOMEN IN BREAST CANCER TREATMENT

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Abstract: Cancer is a disease that originates in the genes of a cell. The disordered proliferation of this cell infiltrates tissues and organs giving rise to the formation of malignant tumors. Breast cancer (BC) is the most frequent oncological disease among Brazilian women and is the cancer that kills the most in Brazil and in the world. Currently, sophisticated treatments have allowed the achievement of cure or the prolongation of life with quality. However, the symbolic representation of cancer has not changed and the population continues to associate the diagnosis with suffering, pain and death. Breast cancer has as one of its consequences the presence of psychological symptoms that require evaluation and verification of the need for psychological follow-up during treatment. Among the possible symptoms, anxiety and depression appear significantly in most women during treatment. This study aimed to assess the effectiveness of psychological intervention for the treatment of women with BC. The sample consisted of 26 women divided alternately into a control group and an intervention group. The sociodemographic questionnaire and the Hospital Anxiety and Depression Scale were used as data collection instruments. After statistical analysis, it was observed that anxiety significantly decreases after the psychological intervention sessions, while in the control group there was no significant difference between the two moments of the interviews. The same occurred for depression, because in the intervention group a significant difference was observed at the 1% level between the means of the proposed scale. It is concluded that the psychological intervention strategy used in this study is beneficial for the relief of psychological symptoms, especially for anxiety and depression, and, consequently, for promoting the well-being and quality of life of women living with the disease.

Keywords: Anxiety. Depression. Psychological intervention. Breast cancer.

INTRODUCTION

Cancer is a disease that originates in the genes of a cell. The disordered proliferation of this cell infiltrates tissues and organs giving rise to the formation of malignant tumors. (INCA, 2015; YAMAGUCHI, 2003). In Brazil, breast cancer (BC) is the most responsible for deaths in women from this type of disease, and the estimate for 2016 was 57,960 cases in the country. According to the Mortality Information System (SIM), an average of 14,000 deaths from breast cancer are recorded in Brazil each year. (INCA, 2017).

With the advancement of technology and medicine, important progress has been observed in relation to the diagnosis and treatment of cancer. Currently, sophisticated treatments have allowed the achievement of cure or the prolongation of life with quality. However, the symbolic representation of cancer has not changed and the population continues to associate the diagnosis with suffering, pain and death. (KOVACS, 2016).

Breast cancer has as one of its consequences the presence of psychological symptoms that require evaluation and verification of the need for psychological follow-up during treatment. (SANTICHI et al., 2012). It is possible to perceive that the impact of the diagnosis and treatment of cancer are usually accompanied by significant psychological symptoms, being a moment of exacerbation of emotional conflicts and decision-making.

Among the possible symptoms, anxiety and depression appear significantly in most women undergoing breast cancer treatment. (FERREIRA et al., 2015).

Brazilian studies show that the prevalence of anxiety and depression in women with breast cancer is 20 to 30 percent.

(CANGUSSU et al., 2010; FERREIRA et al., 2015; SANTICHI et al., 2012).

SHOU et al. (2001) emphasize the importance of using means that help the health professional to assess and identify the risks of anxiety and depression, as well as to carry out interventions with patients to minimize emotional morbidity in the period after treatment.

Therefore, as important as realizing and understanding the psychological aspects resulting from breast cancer is the need to treat and minimize the suffering caused by the impact of the disease. Thus, it is observed that psychological interventions must accompany and be part of all stages of treatment for women with breast cancer.

Women's health encompasses holistic care, requires attention beyond physical and reproductive needs, values social, emotional and spiritual dimensions in order to humanize health care. (LOPES, 2014).

Aiming at comprehensive health care for women with breast cancer and helping this patient to face her illness in a more adaptive way, this study is justified in providing theoretical bases for the use of this strategy in the hospital environment and a better adaptation and adjustment. psychological treatment and rehabilitation for women with breast cancer.

METHODOLOGY

The present research was configured as an experimental design with a non-equivalent control group, with intervention, of a quantitative approach, which sought to evaluate the psychological intervention in the process of treating women with breast cancer.

The study used the theoretical assumptions of short-term Gestalt-therapy in the psychological intervention. On average, 12 sessions of 50 minutes were performed with each patient in the intervention group.

The study population consisted of women diagnosed with breast cancer. The sample consisted of 26 women diagnosed by mastologists at the University Hospital (HU-UFPI) with systematic sampling, using a lottery to allocate the first participant in the control group or in the experimental group and the others were assigned alternately, according to their arrival at the hospital. treatment service.

A form for characterizing the participants (control group and experimental group) was used for data collection and was divided into two sessions: sociodemographic characteristics, such as age, color/race, education, monthly family income, marital status; and clinical characteristics, such as date of diagnosis, frequency of diagnostic tests, family history of breast cancer, alcohol consumption, smoking.

To assess the levels of anxiety and depression, the Hospital Anxiety and Depression Scale (*HADS*) authored by Zigmond & Snaith, 1983, validated in Brazil by Botega et al. (1995).

For quantitative data, the mean and standard deviation were calculated. The comparison of the frequencies of the answers according to the nature of the questions (anxiety and depression) was performed by means of a comparison of means test, Student's t test. To study the variation between the means of the HADS scale, between and between groups (intervention and control), the *one-way ANOVA test* was used and the *post-hoc* test was the Tukey test (ARANGO, 2009). The investigation of the relationships between socioeconomic variables and the mean scores of the HADS scale for anxiety and depression was carried out using the Kendall Correlation Coefficient, as they are categorical variables.

The participants were divided into a control group (group 1) and intervention group (group

2). Group 1 consisted of patients undergoing chemotherapy who did not undergo any type of psychological intervention. Group 2 was composed of women recently diagnosed with breast cancer and who underwent a psychological intervention session during the first three months of treatment. Women in both groups responded to the sociodemographic and clinical form and the HADS. Women in both groups (group 1 and group 2) were evaluated before and after three months of starting chemotherapy.

The project was submitted to the Research Ethics Committee (CEP) on 05/04/2016, following the recommendations of Resolution No. 466 of 2012, which regulates ethical aspects in research involving human beings. CAAE: 53733716.2.0000.5214

RESULTS

It was found that half of the patients in the intervention group were between 42 and 52 years of age (50%). Most women in the intervention group were of mixed race (57.1%), all were credulous in the Catholic religion (100.0%), with a family income of up to one minimum wage (28.6%) or one to two salaries (28.6%). Five (35.7%) had incomplete secondary education and five (35.7%) had completed higher education. Most were married or in a stable relationship (42.9%).

Among the women in the control group, 50% were aged between 52 and 62 years. The majority declared themselves to be of mixed race (50%). All patients in the control group claimed to be Catholic (100%). As for family income, most have an income of one minimum wage (58.3%). Most women in this group are married or live in a stable relationship (58.3%). Regarding education, the majority of women in the control group had incomplete elementary education (33.3%).

As for the clinical profile of the interviewees, it was observed that the majority of women in the intervention group did not undergo examinations frequently (71.4%). Among the women with a family history of cancer (42.9%), two (14.3%) had a history of breast cancer in the family and two (14.3%) had cervical cancer. All women interviewed in the intervention group were not using psychiatric medication (100%). Most do not use tobacco (64.3%) and do not consume alcoholic beverages (64.3%).

In the control group, in relation to the clinical profile, most patients did not undergo tests frequently (41.7%). Among women with a family history of cancer (58.3%), three (25%) had a history of breast cancer. All did not use psychiatric medication (100%), and most did not use tobacco (75%), also did not consume alcohol (83.3%).

To analyze the frequency of responses to questions that addressed anxiety, before and after three months of treatment in the intervention group and in the control group, the means comparison test, Student's t test within the group (p^1) and between the groups (p^2), where $p \leq 0.05$ means that they differ statistically. It was observed in the variable "feeling tense or contracted", in the intervention group that the psychological sessions were efficient, because after the therapy, there was a significant improvement ($p < 0.01$), while the control group showed a worsening.

In the variable "I feel a kind of fear, as if something bad was going to happen", an improvement was observed in the intervention group, in which, in the second application of the scale, the majority ($n = 5$) of the patients reported not feeling afraid, with statistically significant difference ($p = 0.03$), while in the control group there was no significant difference between clinical responses ($p = 0.3$).

In the variable "I have my head full of worries", the patients in the intervention group

showed improvement once, since, in the first application of the scale, the majority (n = 9) of the patients stated that their heads were full of worries most of the time. time, and in the second application of the instrument, the majority (n = 8) reported feeling their heads full of worries from time to time. Among the control group, there was also a significant difference for this variable, which suggests that the group presented worsening after the three months of treatment.

By comparing the means of the hospital anxiety and depression scale, it was observed that anxiety decreased significantly after the psychological intervention (p = 0.01) and that in the control group there was no significant difference in relation to the frequency of responses.

The frequency of patients' responses regarding depression was observed in the variable "I laugh and have fun when I see funny things" there was a statistically significant difference (p = 0.03), which suggests an improvement in relation to depression in the group where there was psychological intervention. Still in this group, there was a significant difference in the analysis of the variable "I am slow to think and do things" (p = 0.05).

In all the variables of the scale, there was no statistically significant difference in the control group regarding depression, but when comparing the means of the scale between the groups, a significant difference was observed, with a significance level lower than 1% and 4% for the intervention group.

The means between the groups studied showed, according to ANOVA, a statistically significant difference at the level of 1% and the means of the scales before and after in the intervention group, for anxiety, showed differences, and at the level of 5% in the intervention group for anxiety. depression. Considering that in the control group, both for anxiety and depression, the averages did not present significant differences, so the proposed psychotherapeutic sessions proved to be effective for the interviewees.

As for the sociodemographic and clinical variables that showed a correlation with the anxiety and depression scale in the intervention group. It was observed that these variables did not influence the anxiety score before the intervention. While after the intervention, the age variable (0.51; < 0.01) showed a moderate, statistically significant relationship. Regarding depression before the intervention, the variables that significantly influenced and had a moderate relationship, according to the Kendal correlation test, were: income (-0.43; 0.03), marital status (0.44; 0 .02), cancer in the family (0.44; 0.02), type of cancer (0.45; 0.01). The variables age, income and education showed a significant influence with a moderate relationship after the intervention.

DISCUSSION

This study evaluated the effectiveness of psychological intervention in women with breast cancer undergoing chemotherapy at the University Hospital of Piauí.

The results of this work show the socioeconomic and clinical characterization of the women belonging to the study. It was observed that the age prevalence of the women in the study was between 42 and 52 years of age in the intervention group and between 52 and 62 years of age in the control group. This data was also found in recent epidemiological studies carried out in Pará and Rio de Janeiro (PENHA et al., 2013; NUNES, et al., 2013). According to the National Cancer Institute, age is one of the main risk factors for developing breast cancer due to lifetime exposures and biological changes resulting from aging. Women over 50 are more likely to develop the disease. (INCA, 2017).

The predominant color/race in the study was brown, and this data differs from other studies carried out in Brazilian states where the prevalence of patients with breast cancer is white. (CINTRA, 2008; NUNES, 2013; MORAES, 2006). This difference in findings may be related to the fact that in Piauí more than 60% of the population self-declare as brown. (IBGE, 2010).

When evaluating the religion variable, it was observed that all the patients involved in the study claimed to have a religion and that they believed in the Catholic religion. An article published in 2011, which analyzed the relationship between spirituality and cancer from the patient's perspective, demonstrated in its results that spirituality can be a good strategy for the patient to face cancer, as well as a subsidy for the relief of the suffering caused by cancer. illness. (GUERREIRO et al., 2011).

Regarding the family income variable, the study carried out at the university hospital of ''Universidade Federal do Piauí" found that the patients evaluated were mostly low-income. In the intervention group, the percentage was equivalent: 28.6% for women with a family income of up to one minimum wage and one to two minimum wages; and, in the control group, 58.3% of the patients reported a family income of up to one minimum wage. This result was expected, considering that the place of study is part of the public health network of the State and the fact that in Brazil, even though the Unified Health System (SUS) is universal and a right of any citizen, people with greater socioeconomic power benefit from supplementary health services. (MENDES, 2013).

The sample revealed homogeneity in both groups in relation to the marital status variable, as most patients reported being married or in a stable relationship. The fact that the patients are married is a relevant factor for psychological intervention, given that the diagnosis and treatment of breast cancer causes changes in the couple's life, bringing the need for support to better cope with the disease. (FERREIRA, 2011).

It was observed that the education variable was equivalent in the intervention group. The percentage of women who had at least incomplete primary education was the same as the women with higher education in the group. However, even though women with a higher level of education were present in this group, it was observed that most patients did not perform their breast cancer screening and diagnosis exams frequently, contradicting the information that self-care may be related to the level of education. of schooling and information.

A study carried out at Hospital de Clínicas of ''Universidade Federal do Triângulo Mineiro" showed different data from the findings of this study in relation to the variables of schooling and frequency of examinations. The study by Silva and Riul (2011), which aimed to identify risk factors, according to INCA, for breast cancer, showed that there was a relationship between knowledge about screening and diagnosis tests with schooling, where the higher the schooling of the patients, greater was the knowledge and performance of the exams by them.

Still with regard to the variables of schooling and frequency of examinations, a study published in ''Revista Brasileira de Oncologia Clínica" found that a low educational level expresses the patient's level of knowledge, that is, the lower the level of education, the lower the knowledge about the performance. exams essential for the diagnosis of cancer and, consequently, early detection. (DUGNO et al., 2014).

When performing the Kendall correlation test, it was observed that the education variable had a significant influence with a

moderate relationship after the intervention. The relationship between schooling influenced the fact that women remained depressed. The one with the highest education had a lower score on the scale and the one with the lowest education had a higher score on the scale used in the study.

The variable that assesses the existence of a first-degree relative with some type of cancer showed that, in the control group, 58.3% of the interviewees had a first-degree relative with cancer, while in the intervention group, 57.1% said they did not have a relative with cancer. In the control group, 25% of the patients reported that the family member's cancer was in the breast.

According to Lufiego (2012), breast cancer in first-degree relatives is an independent risk factor for the onset of breast cancer, given that the risk of breast cancer is twice as high when there is a history of a mother with cancer under 40 years of age. Using Kendal's correlation test, in which the variables "cancer in the family" and "type of cancer" showed a moderate relationship in the intervention group with the first application of the HADS scale, in relation to depression we can infer that the fact that the patient has a first-degree relative with cancer, especially with breast cancer, may favor depressive symptoms when receiving the same diagnosis.

According to the National Cancer Institute, hereditary factors are related to the presence of mutations in the BRCA1 and BRCA2 genes. Although the genetic factor of breast cancer is responsible for 5% to 10% of cases, women who have cases of breast cancer or at least one case of ovarian cancer in blood relatives, or breast cancer in men, also in consanguineous kinship, are considered to be at greater risk for developing the disease. (INCA, 2017).

Also according to INCA (2017), smoking and alcohol consumption are part of the behavioral and environmental risk factors for the occurrence of breast cancer. Our study showed that the vast majority of interviewed patients did not maintain these harmful habits to health, suggesting self-care and contrasting with the variable frequency of examinations.

The diagnosis of breast cancer has psychological repercussions on a woman's life and reflects changes in the way a woman deals with her body and mind, so that this woman becomes an individual more vulnerable to the development of depression and anxiety. (LUFIEGO, 2012).

The research carried out at the University Hospital of the UFPI reached its objective, considering that both for the symptoms of anxiety and for depression, the intervention group showed improvement after the psychological sessions. While in the control group, although no statistically significant difference was observed regarding anxiety and depression, the patients maintained equivalent scores after the three-month period.

When analyzing the frequency of responses regarding anxiety and depression of the patients evaluated in this research, belonging to both groups, it was possible to observe a decrease in these symptoms in patients who underwent psychological interventions. Such results suggest that psychological intervention proved to be effective for the relief of symptoms of anxiety and depression in patients with breast cancer who were undergoing chemotherapy.

Corroborating the results found in this research, a study carried out in 2013 with 48 articles concluded that psychological intervention programs are effective for the adaptation of patients to breast cancer illness, but suggests that future studies need to focus on the evaluation of the processes of change underlying intervention programs. (BRANDÃO; MATOS, 201 5).

A study carried out in London, which aimed to assess the prevalence and risk factors

for anxiety and depression in women with breast cancer, concluded that psychological intervention is necessary for women with this type of disease, especially in the first year after breast cancer. diagnosis, and during the period in which there is a possibility of disease recurrence. These findings suggest that psychological support is important throughout the illness process, as well as during the five years in which the woman remains under medical care and with the fear of the tumor returning. (BURGESS et al., 2005).

Still in this author's study, there is a factor that shows a relationship with our research. The research carried out with patients undergoing chemotherapy treatment at the University Hospital of UFPI showed a statistically significantly moderate correlation for the age variable in relation to anxiety in the intervention group after three months of psychological follow-up. For Burgess et al. (2005), the young age of the patient interferes inversely with her anxiety, that is, the younger the woman is when she receives the diagnosis of breast cancer, the greater the probability of developing anxiety.

Regarding depression, the studies found present results consistent with the findings of this research. According to Bottino (2009), the prevalence of BP in patients with breast cancer is 10% to 25%, and adjuvant cancer treatment would be a factor that would increase the risk and intensity of depressive symptoms due to the association with the effects. treatment side effects. The present research did not evaluate this relationship, but because it was an intervention study, in which it was possible to assess depressive symptoms before and after, it was observed that psychological intervention is an important strategy to favor the reduction of depressive symptoms. and, consequently, provide a better coping with the illness condition.

Jassim et al. (2015) conducted a review study in scientific databases that sought to evaluate the effects of psychological interventions on psychological morbidities, quality of life and survival in women with non-metastatic breast cancer. This study concluded that cognitive-behavioral therapy produced favorable effects in terms of decreasing anxiety, depression, and mood disorders.

The research carried out at the University Hospital of UFPI is very relevant because it points out that attention to the psychological aspects involved in breast cancer is essential and favors better adaptation and coping with the disease, as well as the emotional well-being of the patient during and after chemotherapy treatment. thus decreasing the possibility of abandonment or failure in treatment due to psychological issues. According to Singer et al. (2014), cancer patients with depression are three times more likely to fail in treatment than patients who do not have depressive symptoms, and based on this, it was proposed in their study to use an intensive care model by health services, combining screening, medical consultation and mental health service in a structured way, with the aim of providing emotional well-being for cancer patients.

Although the presence of a psychologist has been mandatory in oncology care units in Brazil since 1998, according to ordinance No. of oncology services. (BRAZIL, 2017).

At the largest international conference on cancer organized by the North American Association of Clinical Oncology (ASCO), researchers presented their concerns regarding the psychological aspects involved in cancer and the lack of psychological support for patients.

Relevant studies on psychological interventions were presented at the ASCO Congress in Chicago in June 2017. These studies brought positive results regarding the reduction of psychological symptoms such

as anxiety, depression, distress, stress and improvement in the quality of life of cancer patients when submitted to to innovative psychological interventions such as web conferencing techniques, a new technique called *Conquer Fear,* and a brief intervention called Managing Cancer and Living Meaningfully. (BEITH, 2017; RODIN, 2017).

Finally, a literature review carried out in 2014 concluded that psychological intervention during breast cancer treatment favors treatment adherence and contributes to the demystification of the disease. (ROMAZZINI; SANTOS, 2014).

It was observed that the researched literature showed a scarcity of psychological intervention studies that used short-term Gestalt-therapy as a theoretical basis for support. It was observed that most of the studies found used group psychotherapy and/or cognitive behavioral approach in their methodology.

CONCLUSION

Through the results found by this research, it is clear to observe that women with breast cancer undergoing chemotherapy, when submitted to psychological interventions simultaneously, present an improvement in the symptoms of anxiety and depression. We conclude that psychological intervention strategies are beneficial and relevant for the relief of psychological symptoms and, consequently, for promoting the well-being and quality of life of women living with this disease.

REFERENCES

ARANGO, H. G. **Bioestatística teórica e computacional**. 3 ed. Rio de Janeiro: Guanabara Koogan, 2009.

BEITH, J. Psychological intervention lowers survivors fear cancer. In: **2017 American Society of Clinical Oncology (ASCO) Annual Meeting.** Disponível em: <https://www.asco.org/about-asco/press-center/news-releases/psychological-intervention-lowers-survivors-fear-cancer>. Acesso em: 20 jun. 2017.

BOTEGA, N. J.; ZOMIGNANI, M.; WAB, P. Transtornos de humor em enfermaria de clínica médica e validação de escala de medida (HAD) de ansiedade e depressão. **Revista de Saúde Pública, São Paulo,** v. 29, n. 5, 1995. p. 355-363.

BOTTINO, S, M, B; FRÁGUAS, R; GATTAZ, W. F; Depressão e câncer. In: **Revista de psiquiatria clínica.** v. 36, n. 3, 2009. p. 109-115.

BRANDÃO, T. B.; MATOS, P. M. Eficácia das intervenções psicológicas em grupo dirigidas a mulheres com cancro da mama: uma revisão sistemática. In: **Revista Portuguesa de Saúde Pública**, v. 33. doi: 10.1016/j.rpsp.2015.01.001, 2015. p. 98-106.

BRASIL. **Lei 11. 664, de 29 de abril de 2008.** Dispõe sobre a efetivação de ações de saúde que assegurem a prevenção, detecção, tratamento e o seguimento dos cânceres do colo uterino e de mama, no âmbito do SUS. Disponível: <http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2008/lei/l11664.htm>. Acesso em: 20 maio 2017.

_____. **Portaria nº 3.535 de 2 de setembro de 1998**. Estabelece critérios para cadastramento de centros de atendimento em oncologia. Disponível em: <http://linus.husm.ufsm.br/janela/legislacoes/hemato-oncologia/centros-oncologia/ portaria-no-3535-de-2-de-setembro-de-1998.pdf>. Acesso em: 20 maio 2017.

BRASIL. Ministério da Saúde/Instituto Nacional do Câncer. Disponível em: <http://www.inca.gov.br>. Acesso em: 16 set. 2015.

BURGESS, C. et al. Depression and anxiety in women with early breast cancer: five year observational cohort study. In: **BMJ – British Medical Journal**, v. 330, n. 7493, 2005. p. 702.

CANGUSSU, R. O. et al. Sintomas depressivos no câncer de mama: Inventário de Depressão de Beck – *Short Form.* In: **J Bras Psiquiatr**. v. 59, n. 2, 2010. p. 106-110.

CENSO DEMOGRÁFICO 2010. Características gerais da população, religião e pessoas com deficiência. Piauí: IBGE, 2010. Disponível em: <http://biblioteca.ibg e.gov.br/visualizacao/periodicos/94/cd_2010_religiao_deficiencia.pdf>. Acesso em: 17 maio 2017.

CINTRA, J. R. D. et al. Sobrevida específica de pacientes com câncer de mama não-metastático submetidas à quimioterapia adjuvante. In: **Rev. Assoc. Med. Bras**, São Paulo, v.54, n.4, jul./ago., 2008.

DUGNO, M. L. G. et al. Perfil do câncer de mama e relação entre fatores de risco e estadiamento clínico em hospital do Sul do Brasil. In: **Revista Brasileira de Oncologia Clínica.** v. 10, n. 36, 2014. p. 60-66.

FERREIRA, A. S. et. al. Câncer de Mama: Estimativa da Prevalência de Ansiedade e Depressão em Pacientes em Tratamento Ambulatorial. In: **Arq. Cienc. Saúde UNIPAR**. Umuarama: UNIPAR, v. 19, n. 3, 2015. p. 185-189.

FERREIRA, D. B. Nossa vida após o câncer de mama: percepções e repercussões sob o olhar do casal. In: **Rev. bras. enferm.**, Brasília, v. 64, n. 3, maio/jun., 2011.

GUERRERO, G. P. et al. Relação entre espiritualidade e câncer: perspectiva do paciente. In: **Rev Bras Enferm**, v. 64, n. 1, 2011. p. 53-59.

INCA. Instituto Nacional de Câncer José Alencar Gomes da Silva. **A mulher e o câncer de mama no Brasil.** Coordenação Geral de Prevenção e Vigilância, Divisão de Detecção Precoce e Apoio à Organização de Rede. Rio de Janeiro: INCA, 2014.

_____. Controle do Câncer de Mama, 2017. Disponível em: <http://www2.in ca.gov.br/wps/wcm/connect/acoes_programas/site/home/nobrasil/programa_controle_cancer_mama/fatores_risco>. Acesso em: 22 maio 2017.

JASSIM, G. A et. al. Psychological interventions for women with non-metastatic breast cancer (Review). In: **Cochrane Database of Systematic Reviews,** 2015.

KOVÁCS, M. Prefaciador. In: BIFULCO. V.A; CAPONERO, R. **Cuidados paliativos**: conversas sobre a vida e a morte na saúde. São Paulo: Manole, 2016.

LOPES, M. H. B. M. Mulheres: Singulares e Plurais. In: **Revista de Enfermagem e Atenção à Saúde (online)**, v. 3, n. 2, jul./dez. 2014. Disponível em: <http://dx.doi.org/10.18554/>. Acesso em: 14 mar. 2017. p. 1-5.

LUFIEGO, C. A. F. **Avaliação psicológica pré e pós-cirúrgica em pacientes mastectomizadas submetidas a procedimento reconstrutivo de mama**. 2012. 114 f. Dissertação (Mestrado em Gerontologia Biomédica)–Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, 2012.

MENDES, E. V. 25 anos do Sistema Único de Saúde: resultados e desafios. In: **Estudos Avançados**, v. 27, n. 78, 2013. p. 27-34.

MORAES, A. B. et al. Estudo da sobrevida de pacientes com câncer de mama atendidas no hospital da Universidade Federal de Santa Maria, Rio Grande do Sul, Brasil. In: **Cad. Saúde Pública**, Rio de Janeiro, v. 22, n. 10, out, 2006. p. 2219-2228.

NUNES, B. A. P. et al. Perfil epidemiológico dos pacientes diagnosticados com câncer de mama em Campos dos Goytacazes. In: **Revista Brasileira de Mastologia**, v. 22, n. 4, Rio de Janeiro, 2013. p. 117-123.

PENHA, N. S. et al. Perfil sócio demográfico e possíveis fatores de risco em mulheres com câncer de mama: um retrato da Amazônia. In: **Rev Ciênc Farm Básica,** APL, v. 34, n. 4, 2013. p. 579-84.

RODIN, G. Psychological intervention relieves distress patients advanced. In: **2017 American Society of Clinical Oncology (ASCO) Annual Meeting**. Disponível em: <https://www.asco.org/about-asco/press-center/news-releases/psy chological-intervention-relieves-distress-patients-advanced>. Acesso em: 20 jun de 2017.

ROMAZZINI, G. S.; SANTOS, A. INTERVENÇÃO PSICOLÓGICA EM MULHERES MASTECTOMIZADAS**.** In: 7ª Semana de Psicologia / 5ª Conferência de Estudos Psicológicos, Santa Fé do Sul. **Anais**... Santa Fé do Sul, 2014.

SANTICHI, E. C. Rastreio de sintomas de ansiedade e depressão em mulheres em diferentes etapas do tratamento para câncer de mama. In: **Psicologia Hospitalar**, v. 10, n. 1, 2012. p. 42-67.

SCHOU, I. et. al. Pessimism as a predictor of emotional morbidity one year following breast cancer surgery. In: **Psycho-oncology,** v. 13, 2004. p. 309-320.

SILVA, P. A.; RIUL, S. S. Câncer de mama: fatores de risco e detecção precoce. In: **Rev. bras. enferm.**, Brasília, v. 64, n. 6, nov./dez., 2011. Disponível em: <http://www.scielo.br/pdf/reben/v64n6/v64n6a05.pdf>. Acesso em: 17 maio 2017.

SINGER, S. et al. Effect of astructured psycho-oncological screening and treatment model on mental health in cancer patients (STEPPED CARE): Study protocol for a cluster randomized controlled trial. In: **Trials**, v. 15, n. 482, 2014. doi: 10.1186/1745-6215-15-482.

YAMAGUCHI, N. H. O Câncer na Visão da Oncologia. In: CARVALHO, M. (Org.) **Introdução à psiconcologia.** São Paulo: Livro pleno, 2013.

ZIGMOND, A. S.; SNAITH R. P. The hospital anxiety and depression scale. In: **Acta Psychiat. Scand.**, v. 67, 1983. p. 361-370.